UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

I.1
7/26/82

154209

DATE: July 26, 1982

SUBJECT: June 3, 1982 Trip Report to Dead Creek Sauget, Illinois

FROM: Michael C. O'Toole

TO: File

On June 3, 1982 at 9:00 a.m., I met Tom Powell of the Illinois Environmental Protection Agency (IEPA) at their office in Collinsville, Illinois. Tom drove me to the Dead Creek site in Cahokia, Illinois. My objective was to determine if personal safety equipment would be required for any contactor installing a chain link fence around the perimeter of the site.

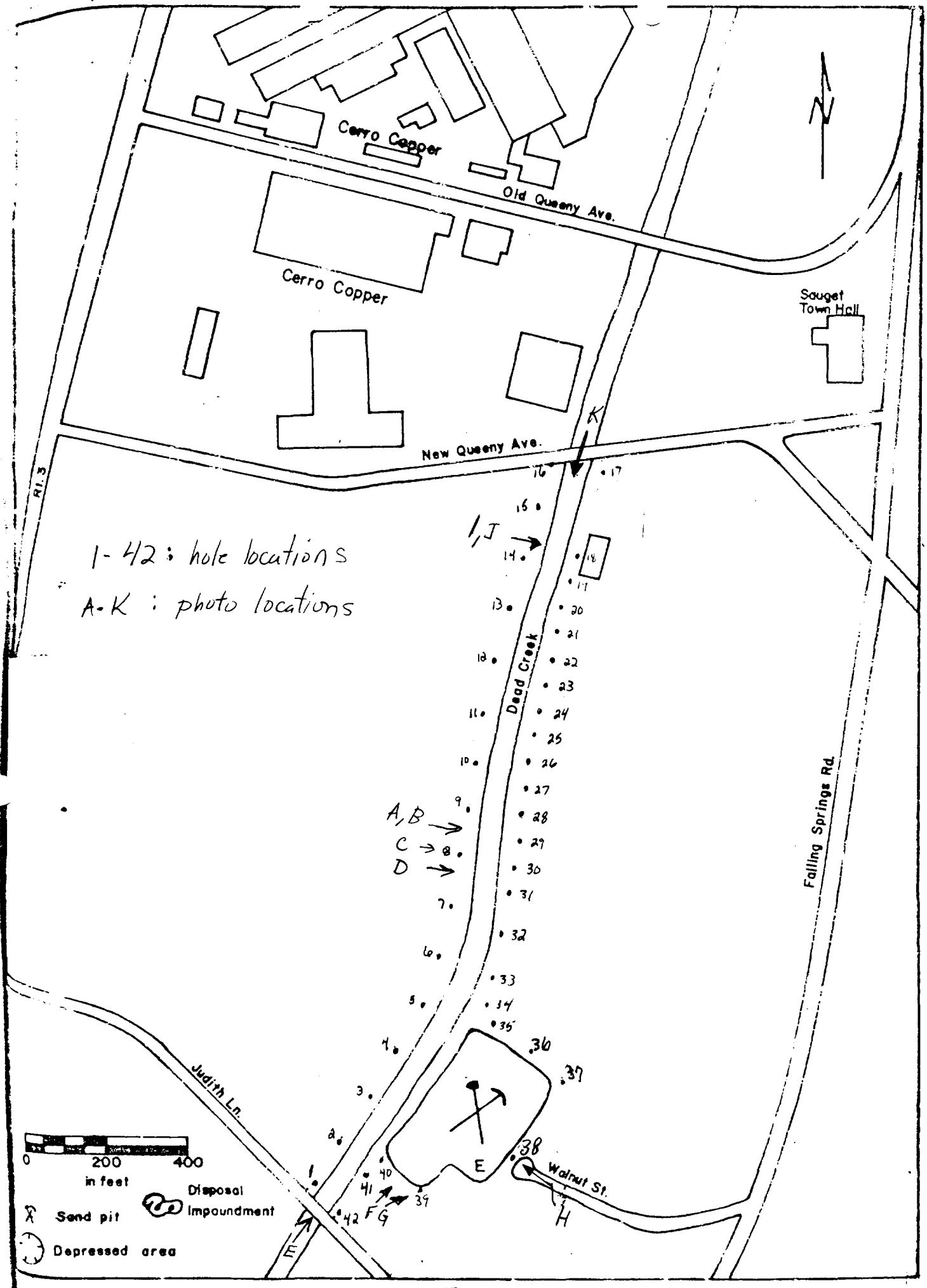
Tom and I arrived at the site around 10:00 a.m. The weather was sunny warm and humid and the termperature was approximately 85°F. The creek bed is approximately 10 feet below the bottom of the existing fence. There was water in the creek but it appeared to be stagnant. Tom remarked that he had never seen that much water in the creek. The existing fence (see photographs) was down in several areas and in one location was being held down with rocks. The existing fence was in definite need of replacement.

I decided that it would be necessary to dig a hole every forty paces as close to the existing fence as possible. Tom and I would then use the HNU Photoionizer to determine if any contaminants gases were emanating from the holes. Tom and I dug 42 holes (see attached map) approximately 18-24 inches deep and 9 inches in diameter. Holes numbers 31, 32, 34 and 35 were the only ones that the HNU readout was greater than the 2 ppm background. The readings for those holes was approximately 4 ppm. Tom was surprised that those holes showed greater than background levels. Tom conducted most of the early investigations at the Dead Creek site and he was very familiar with the locations of the heavy contamination discovered by IEPA.

Tom and I decided that the readings from those four holes could be discounted because they were not significantly higher than background. In addition those readings were probably associated with the farming activities at that portion of the site. A soybean crop had just been planted.

Based on this field trip I decided that no personal safety equipment would be required to install the fence.

cc: Tom Powell, IEPA


Cerro Copper
Old Queeny Ave.
Cerro Copper
Sauget Town Hall
New Queeny Ave.
Rt. 3
1-42 : hole locations
A-K : photo locations
K
I, J
A, B
C
D
Dead Creek
Falling Springs Rd.
Judith Ln.
Walnut St.
E
F G
H
0
200
400
in feet
Disposal Impoundment
Sand pit
Depressed area

Safety Plan

Technical Assistance Team
Region V

DeadCreek, Sauget, Illinois

I. A. Incident Information: See attached Initial Report Sheet

B. Material Information: See attached Chemical Evaluation Sheet(s)

C. Incident/Material Information Reliability: Good___ Fair X Poor___

D. Background Information: Extensive___ Minimal X

E. Overall Hazard: High___ Moderate___ Low X Unknown___

II. A. Incident/Site Description

1. Area Affected: Flat, mostly vacant lots
2. Surrounding Population: 50 -100 within ¼ mile
3. Building(s): Nearest is 100 feet away.
4. Topography: Flat except for Creek bed
5. Site Paln and Site Sketch Attached: Yes___ No X

B. Comments: Chemical hazards reported for the area are non-volatile compounds, including PCB and heavy metals.

C. Site Entry Procedures: See attached Field Information Sheet

D. Emergency Precautions: See attached Field Information Sheet

E. Emergency Information/Telephone/Communications: See attached Field Information Sheet

III. Personnel Protection

Level of Protective Clothing: A___ B___ C X D___

Was this Subsequently Downgraded?: Yes X No___

If Yes, Explain: *See Special Instruction on Field Information Sheet.

List Specific Protective Clothing Required:

1. Full-Mask- 2. Pesticide- 3. Acid Suit- 4. Rubber Boots
5. Purifying Mask 6. Cartridges 7. Pants 8.

Field Monitoring Equipment and Materials Required:

1. HNU Meter 2. Shover/Spade 3. 4.
5. 6. 7. 8.

Decontamination Procedures:

Hotline Location: At a water supply

PDS Stations: 1. Rinse dust from acid pants and boots.

4. 5. 6. 7.

List Equipment, Materials, and Level of Protection Required:

1. Water Spray 2. 3. 4.
5. 6. 7. 8.

Prepared By: Jerry Kelly

Date Prepared: May 21, 1982

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Field Information Sheet

IV. Site Entry Procedures:

Team Size: 1

Station Designation (Name Responsibility) Perform initial survey for volatile materials; then monitor contracting operations.

Special Instructions: Perform initial survey of area in level "C", including turning the soil with a shovel and note presence of volatile materials with an HNU meter. Zero meter response allows downgrading.

V. Emergency Precautions:

Health Hazards: Ingestion or breathing of dusts containing metals or PCB.

Exacuation of Nearby People: Yes ___ No X

If Yes, How Large an Area? ___

Acute Exposure Symptoms (if known): None at present concentrations.

First Aid Instructions for above Symptoms: Remove from area if exposure is suspected.

VI. Emergency Information Sources:

	Name	Town	Phone	Notified Yes	Notified No
Fire	Sauget Fire Dept.	Sauget	(618) 332-6600		x
Police	Sauget Police Department	Sauget	(618) 332-6500		x
Ambulance	Sauget Fire Dept.	Sauget	(618) 332-6600		x
Hospital	Centerville Town Hospital	Alorton	(618) 332-3060		x
Airport	Bi-State Parks AP	Cahokia	(618) 337-6060		x
Heliport	Bi-State Parks AP	Cahokia	(618) 337-6060		x
EPA Contact	Mike O'Toole	Chicago	(312) 886-3008	x	
Explosive Unit					
List Other Resources	Illinois EPA John Renkes	Springfield	(217) 782-7860		x

VII. Emergency Telephone No.:

E & E Regional Office: (312) 635-6560

E & E NPMO Emergency Answersing Service : (716) 882-2804, Pager No. 881-8151

Dr, Harbison: 501-370-8263

TAT Leaders Home Phone Number: (312) 639-1858

Other: Safety Manager (312) 824-2979

VIII. Communications:

Nearest Telephone: Sauget Police Department

Communications Used on Sites: Verbal

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HAZARD EVALUATION OF CHEMICALS

5-8012-1

Chemical Name Chlorobenzene
DOT Name Chlorobenzene
References consulted (Circle)

(HAZMAT Handbook) Chris Merk Index Aldrich CRC (Toxic Safety Manual) (SAX)

Chemical Properties:

Chemical Formula:		Molecular Weight:
C_6H_5Cl		112.56
Physical State:	Solubility:	Boiling Point:
Liquid	Insoluble in Water	131.7°C
Flash Point	Vapor Pressure:	Freezing Point:
29.2°C (CC)	10 mm @ 22.2°	-45°C
Specific Gravity:	Odor/Odor Threshold:	Flammable Limits:
1.106	Almond-like/0.21 ppm	1.3-7.1%

Biological Properties:

TLV: 75 ppm

	Oral-rat LD_{50}		Bluegill	
TLC/TLD:	=2910 mg/kg	Human: NA	Aquatic: 20 ppm (96 hr)	Waterfowl: NA
Dermal Toxicity:			(TL_m)	

Cleanup Recommendations:

Contain with a dike on land, dam under water; dredge or pump material into lined tanks or dumpsters.

Health Hazards and Recommendations:

Moderately toxic, irritant to eyes and nose; use positive pressure SCBA, neoprene gloves, and neoprene-coated clothing.

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HAZARD EVALUATION OF CHEMICALS

5-8112-8

Chemical Name Chlorinated Diphenyls Carclor 1242
DOT Name
References consulted (Circle)

HAZMAT Handbook Chris Merk Index Aldrich CRC Toxic Safety Manual

Chemical Properties:

Chemical Formula:		Molecular Weight:
$(C_{12}H_{10}-X)$		not pertinent
Physical State:	Solubility:	Boiling Point:
solid or liquid	low	very high
Flash Point	Vapor Pressure:	Freezing Point:
286°F		not pertinent
Specific Gravity:	Odor/Odor Threshold:	Flammable Limits:
1.3-1.8 at 20°C	N/A	N/A

Biological Properties:

TLV:	$0.5\text{-}1.0\ mg/m^3$		
TLC/TLD:	Human: inhale TC_{lo}=794	Aquatic: 0278ppm/96m/bluegil	Waterfowl: LD_{50}=2000ppm
Dermal Toxicity: LD_{lo}(rabbit)=794 mg/kg			

Cleanup Recommendations:

Combustible- extinguish with water, foam dry chemical, or CO_2

Insolate and remove discarded material; harmful to aquatic life in very low concentrations

Health Hazards and Recommendations:

Acne from skin contact, vapors cause severe irritation of eyes and throat; equipment should include gloves and protective clothing.